

IN THE CLAIMS

The status of the claims is provided below.

1. (Currently Amended) A method for detecting negatively supercoiled DNA in living cells, characterized by including the steps of incorporating biotinylated psoralen into living cells, irradiating the living cells with long-wavelength UV rays, causing the cells to react with adivin which has been labeled with a color-developing substance, a fluorescent substance, or a chemiluminescent substance, and measuring developed color, emitted fluorescence, or emitted chemiluminescence of the cells.

2. (Currently Amended) A method for detecting a living cell containing negatively supercoiled DNA, characterized by including the steps of incorporating biotinylated psoralen into living cells, irradiating the cells with long-wavelength UV rays, causing the cells to react with adivin which has been labeled with a color-developing substance, a fluorescent substance, or a chemiluminescent substance, and measuring developed color, emitted fluorescence, or emitted chemiluminescence of the cells.

3. (Original) The detection method according to claim 1 or 2, wherein the cells are eukaryotic cells.

4. (Previously Presented) The detection method according to claim 1, wherein incorporation of biotinylated psoralen into cells is performed in the presence of a cell membrane permeation promoting agent.

5. (Currently Amended) The detection method according to ~~any one of~~ claim 2, wherein incorporation of biotinylated psoralen into cells is performed in the presence of a cell membrane permeation promoting agent.

6. (Previously Presented) The detection method according to claim 3, wherein incorporation of biotinylated psoralen into cells is performed in the presence of a cell membrane permeation promoting agent.

7. (New) The detection method according to claim 1 or 2, wherein the detected DNA includes negatively supercoiled DNA on interphase chromosomes.

SUPPORT FOR THE AMENDMENTS

The amendment to Claims 1 and 2 are supported by the Examples of the specification, which clearly describe the application of the method of the present invention to living cells.

Claim 5 has been amended for clarity.

Newly added Claim 7 is supported by the specification at page 21, lines 3-5.

Accordingly, no new matter is believed to have been added to the present application by the amendments submitted above.